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APPLICANT: Boyd TBD APPLN. NO.:

FILING DATE: December 30, 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

\_\_\_ OF 45

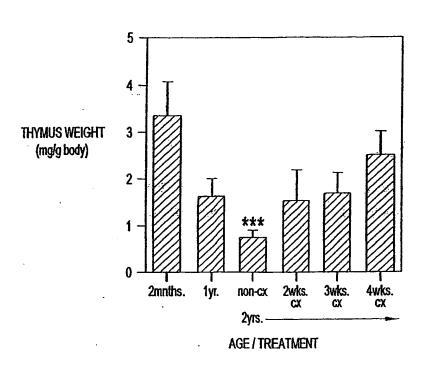


Figure 1A

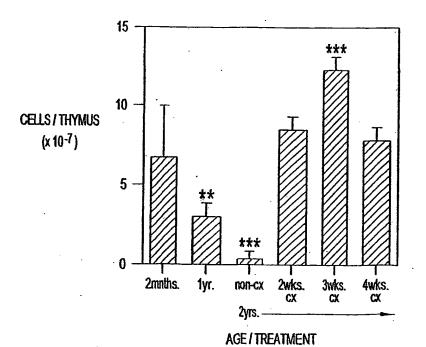


Figure 1B

FILING DATE: December 20, 2003

TITLE: Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153



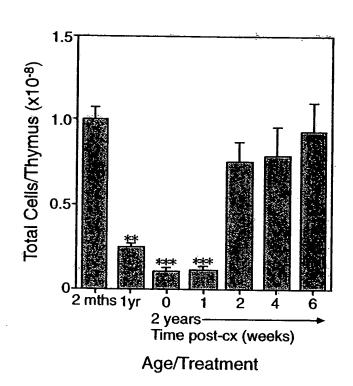


FIGURE 1  $^{\rm c}$ 

FILING DATE: December 36, 2003

TLE: Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

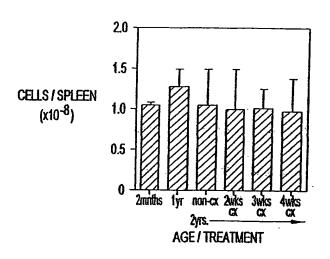


Figure 2A

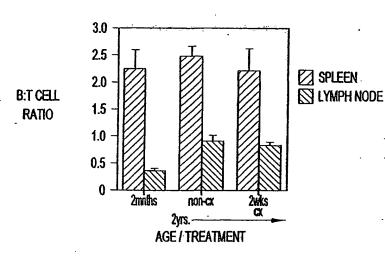


Figure 2c

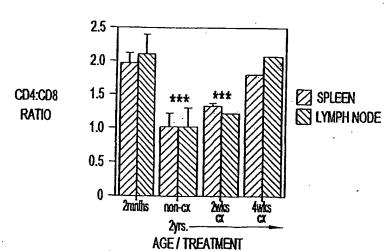


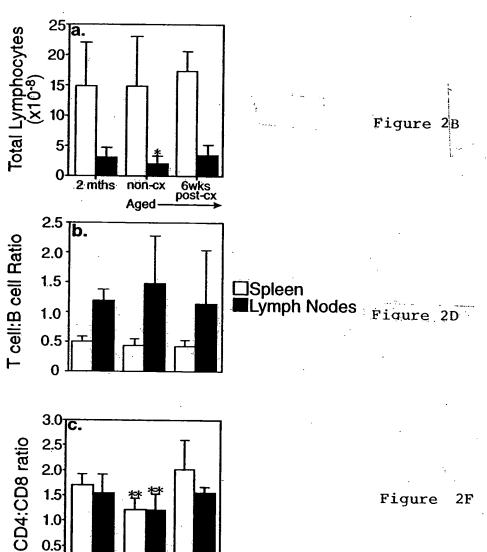
Figure 2

FILING DATE: December **36**, 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

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Age/Treatment

non-cx

Aged-

6wks post-cx

1.0 0.5

2 mths

APPLICANT: Boyd TBD APPLN. NO.:

FILING DATE: December 30, 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153 \$\sumset\$ OF 45

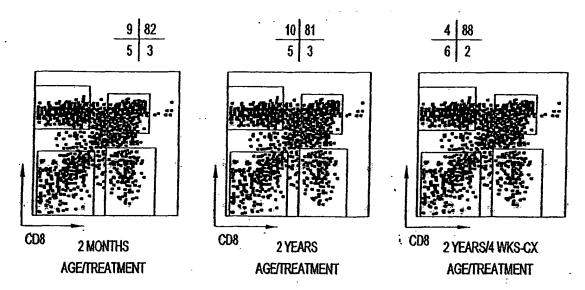


Figure 3

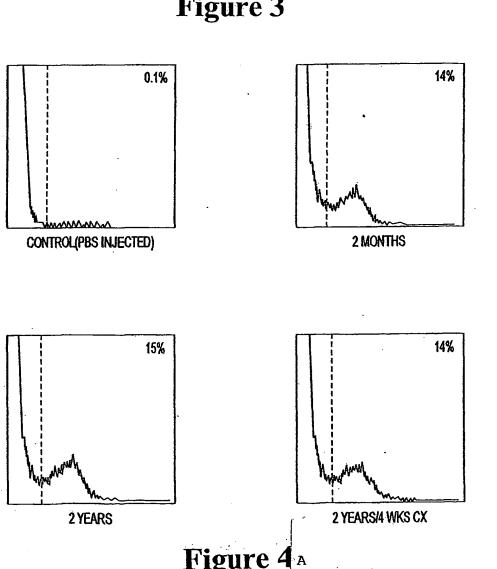


Figure 4A

FILING DATE: December 2003
TITLE: Disease Prevention by Reactivation of the Thymus
DOCKET NO.: NOR-014CP4/286336.153



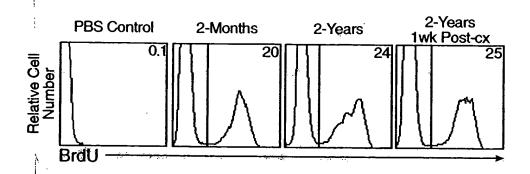
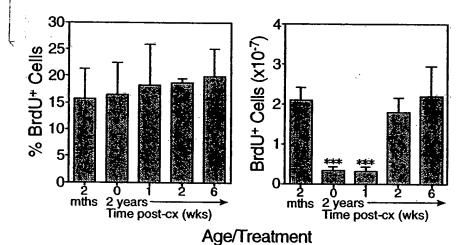
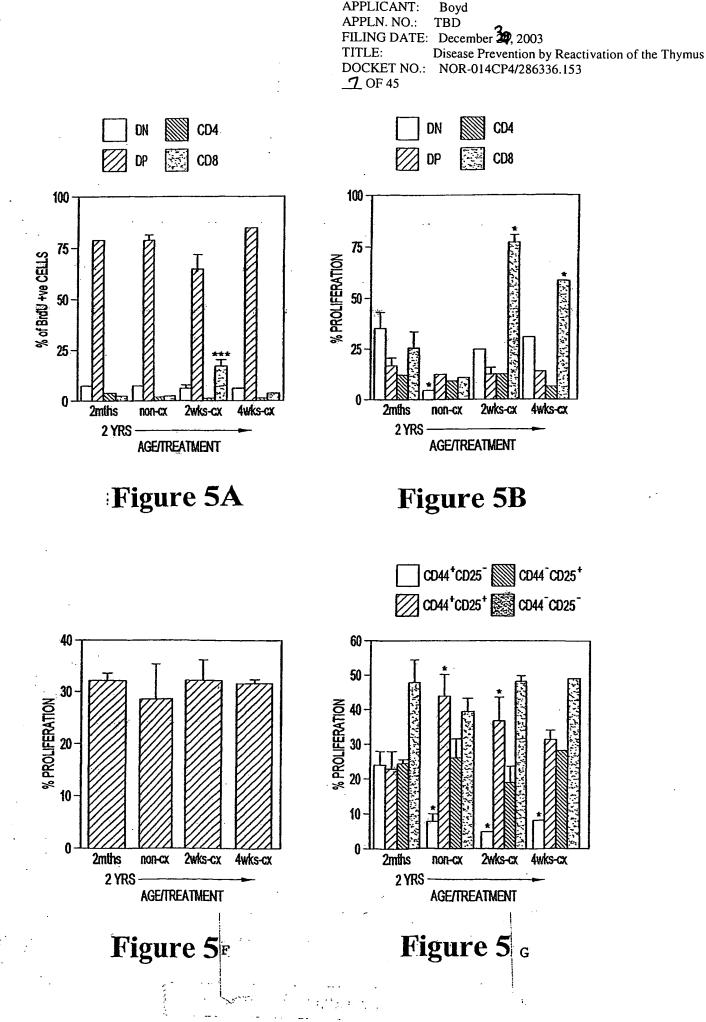


Figure 4C

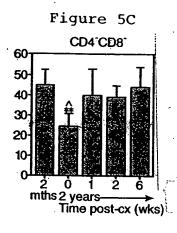


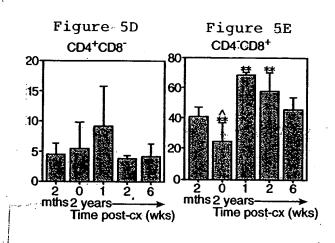


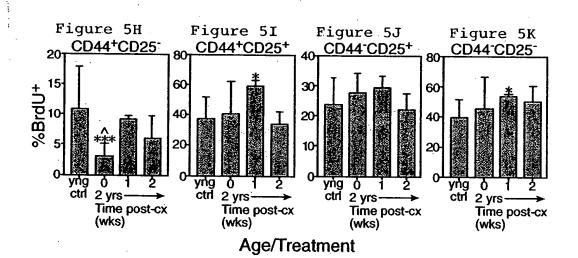
FILING DATE: December 202 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153 **2** OF 45







APPLICANT: Boyd APPLN. NO.: TBD FILING DATE: December 30, 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153 9 OF 45

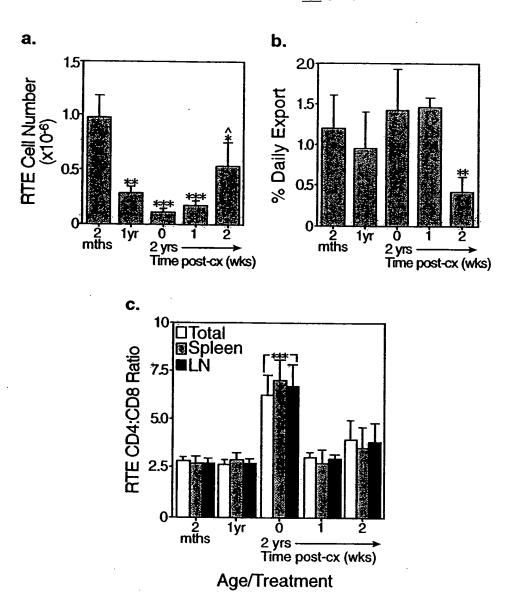


FIGURE 6.

APPLICANT: Boyd TBD APPLN. NO.:

FILING DATE: December **34** 2003

TITLE: Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153

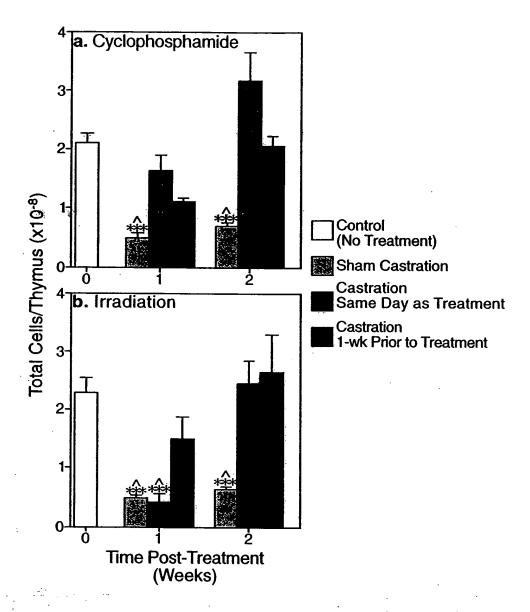


FIGURE 7.

FILING DATE: December 30, 2003

TLE: Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

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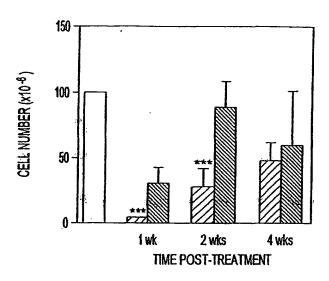
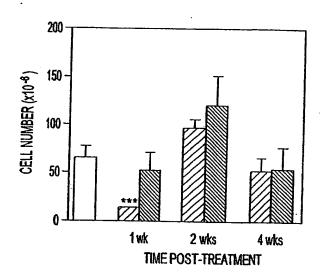


Figure 8A



CYCLOPHOSPHAMIDE ALONE

CYCLOPHOSPHAMIDE AND CASTRATION (SAME DAY)

Figure 8B

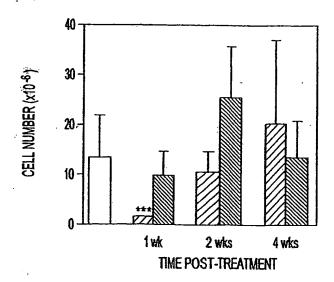
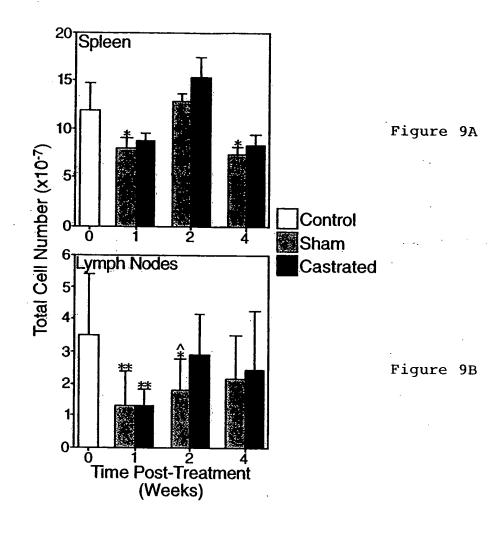


Figure 8c

FILING DATE: December 2003
TITLE: December 2003
Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153



FILING DATE: December 30, 2003

TITLE: Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

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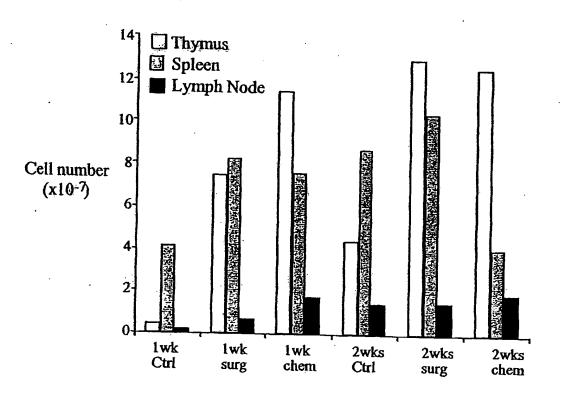
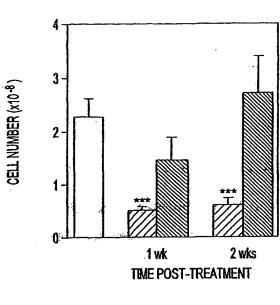
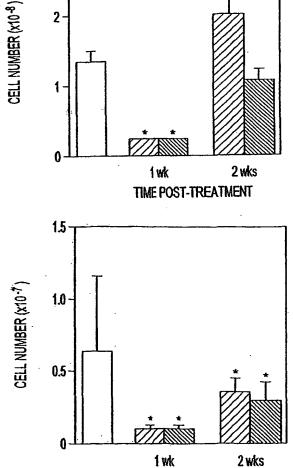


Figure 10

APPLICANT: Boyd APPLN. NO.: TBD FILING DATE: December 39, 2003 Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153 **14** OF 45 Figure 11A CONTROL IRRADIATION ALONE CASTRATION/IRRADIATION one week prior to treatment Figure 11B Figure 11c





TIME POST-TREATMENT

APPLICANT: Boyd APPLN. NO.: TBD FILING DATE: December 29, 2003 Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153 15 OF 45 Figure 12A CONTROL IRRADIATION ALONE CASTRATION/IRRADIATION (SAME DAY) Figure 12B Figure 12c

1.5 1.5 1.0 1 wk 2 wks TIME POST-TREATMENT

1 wk

TIME POST-TREATMENT

3

2-

1.

2.0

1.5

1.0

.5

0

CELL NUMBER (x10-8)

1 wk

TIME POST-TREATMENT

2 wks

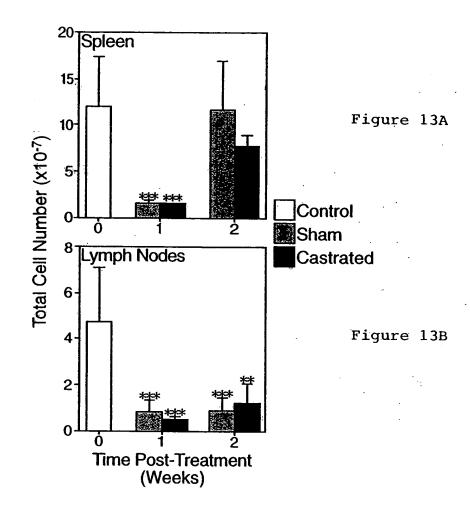
2 wks

CELL NUMBER (x10-8)

APPLICANT: Boyd TBĎ APPLN. NO.:

FILING DATE: December 29, 2003

Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153



APPLICANT: APPLN. NO.:

Boyd TBĎ

FILING DATE: December 4, 2003

Disease Prevention by Reactivation TITLE: DOCKET NO.: NOR-014CP4/286336.153

### LN size post-HSV inoculation

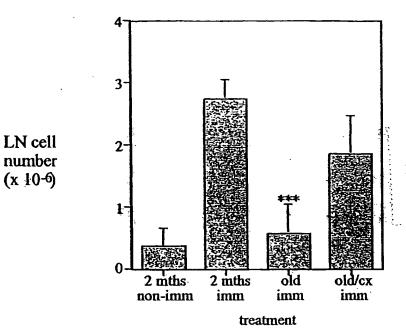


Fig. 14A

#### **Activated cell numbers**

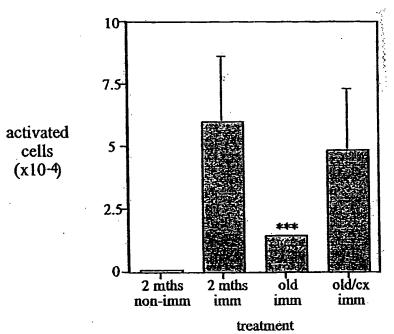
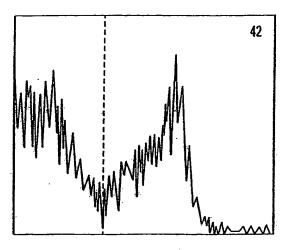


Fig. 14B

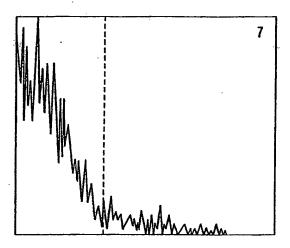
Boyd APPLICANT: TBĎ APPLN. NO.:

FILING DATE: December 26, 2003
TITLE: Disease Prevention by Reactivation of the Thymus
DOCKET NO.: NOR-014CP4/286336.153
12 OF 45



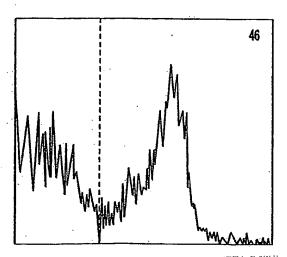
2 MONTHS

Figure 15A



18 MONTHS

Figure 15B



18 MONTHS **CASTRATED** 

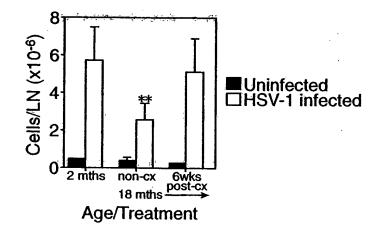
Boyd TBD APPLICANT: APPLN. NO.:

FILING DATE: December **29**, 2003

TITLE: Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

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FILING DATE: December 36, 2003

ITLE: Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

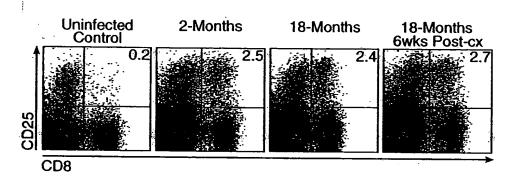


Figure 17A

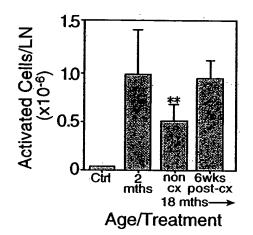


Figure 17B

FILING DATE: December 30, 2003

TLE: Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

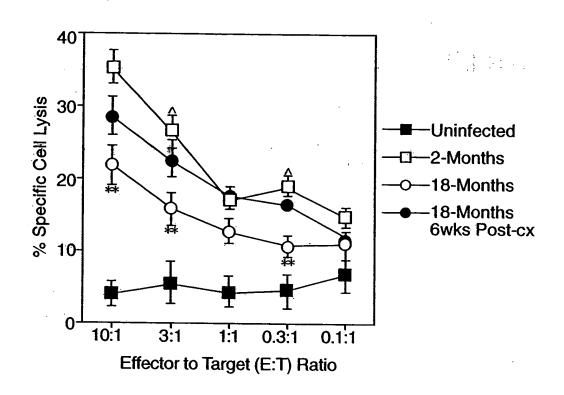


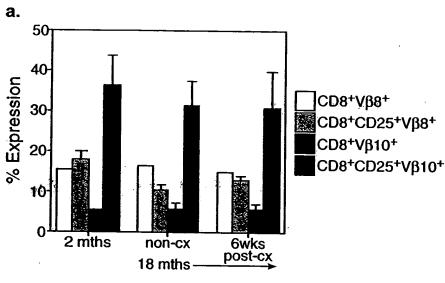
FIGURE 18

FILING DATE: December 30, 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

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### Age/Treatment

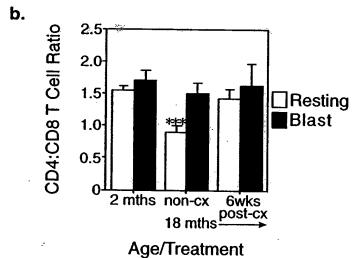


FIGURE 19

FILING DATE: December **20**, 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

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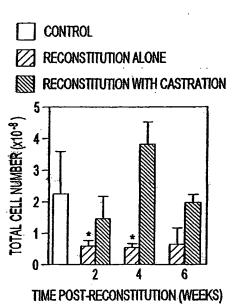


Figure 20A

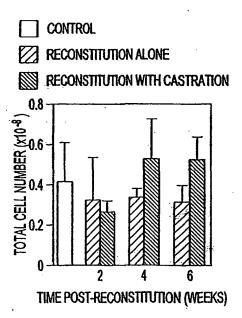


Figure 20c

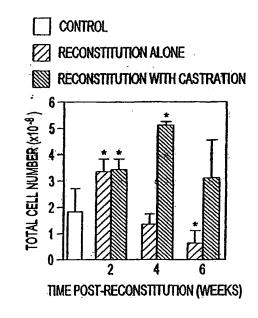


Figure 20B

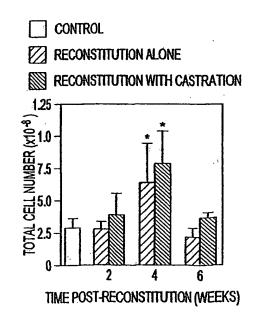


Figure 20D

FILING DATE: December 29, 2003

Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153



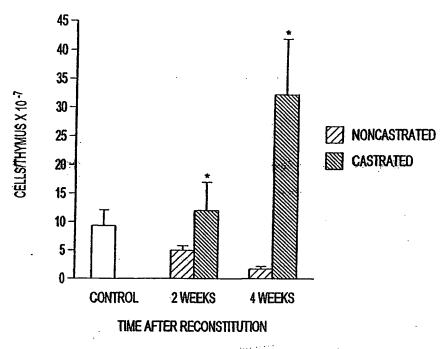


Figure 21A

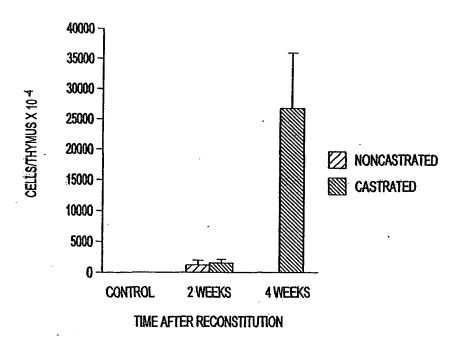


Figure 21B

Boyd TBD APPLICANT: APPLN. NO.:

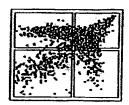
FILING DATE: December 27, 2003

TITLE: Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

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AGE MATCHED



NON-CASTRATED

**CASTRATED** 

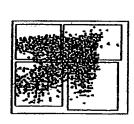
#### 2 WEEKS POST RECONSTITUTION



8



4 WEEKS POST RECONSTITUTION



CD8

APPLICANT: Boyd TBD APPLN. NO.:

FILING DATE: December 30, 2003

TITLE: Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153

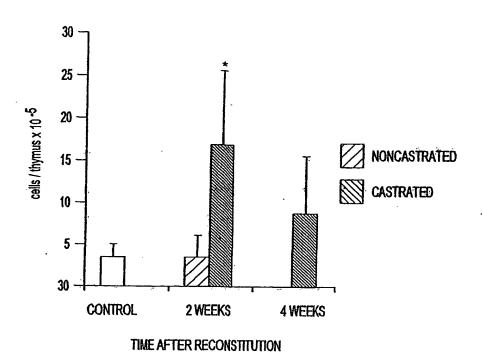
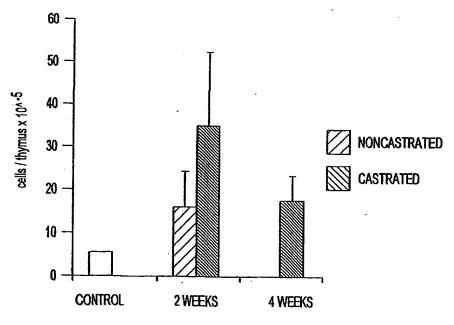


Figure 23A



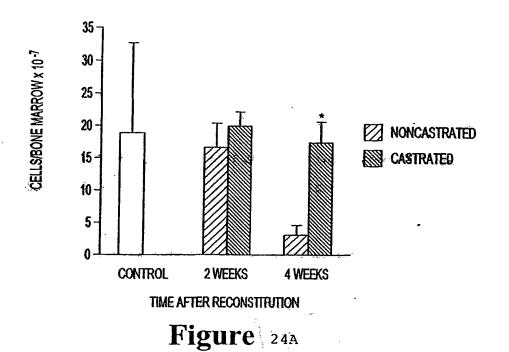
TIME AFTER RECONSTITUTION

APPLICANT: Boyd TBĎ APPLN. NO.:

FILING DATE: December **34** 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153



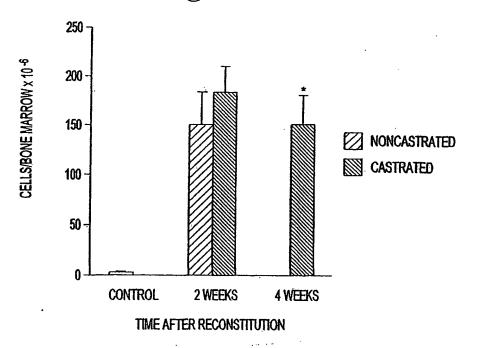


Figure 24B

FILING DATE: December 2003

Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153

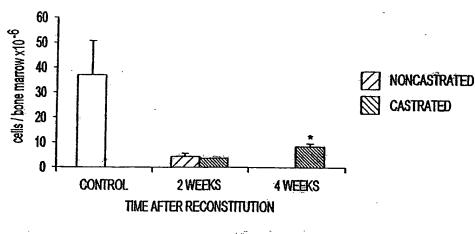


Figure 25A

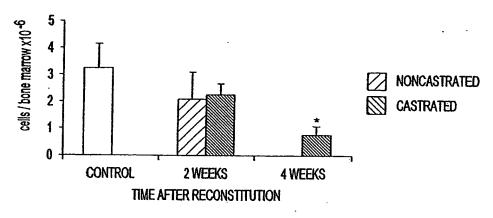
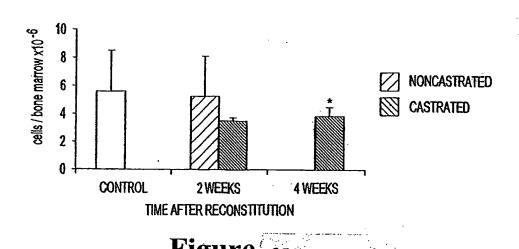


Figure 25B



FILING DATE: December 30, 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

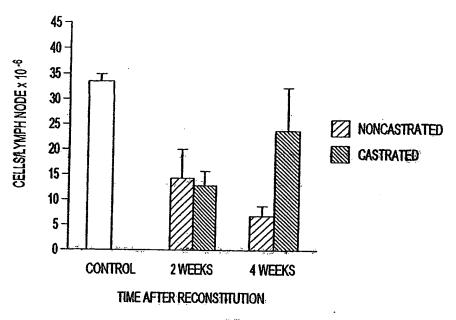


Figure 26A

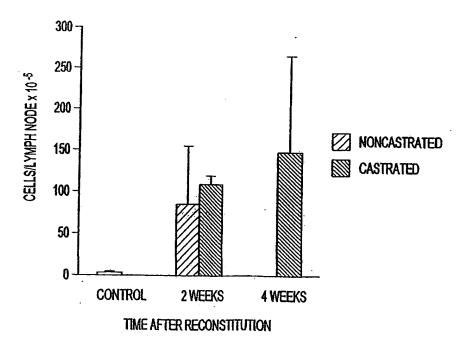
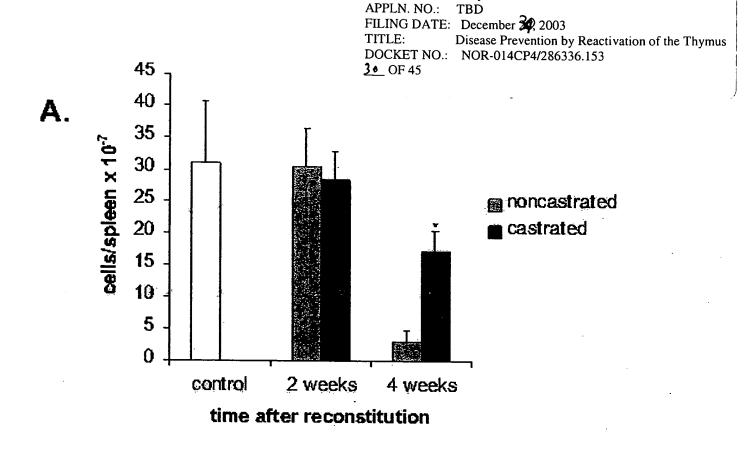


Figure 26B



APPLICANT:

Boyd

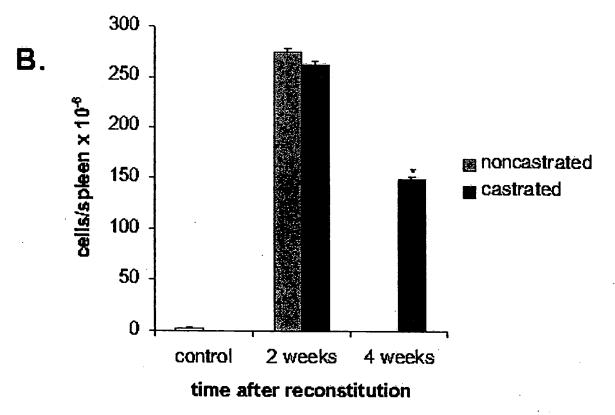
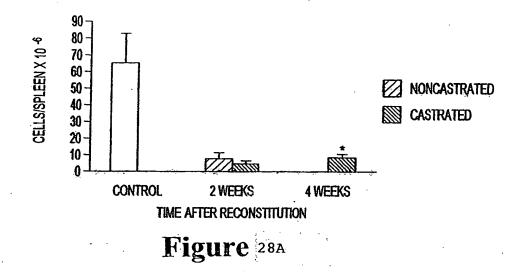


FIGURE 27.

FILING DATE: December 3 2003

Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153

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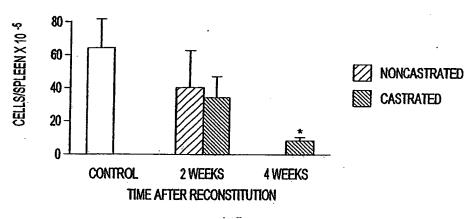
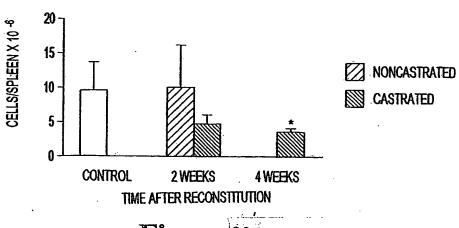


Figure 28B



FILING DATE: December 30, 2003

Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153

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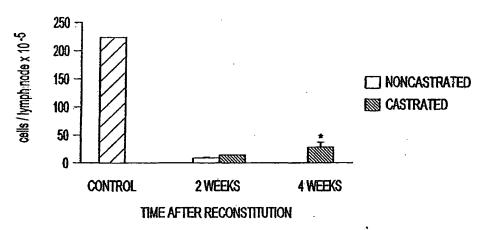


Figure 29A

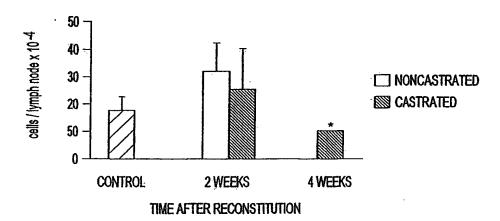
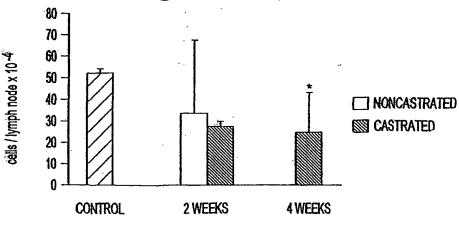


Figure 29B



TIME AFTER RECONSTITUTION

Figure

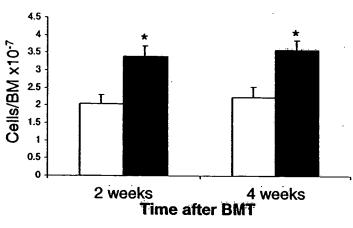
33 OF 45

FILING DATE: December 29, 2003

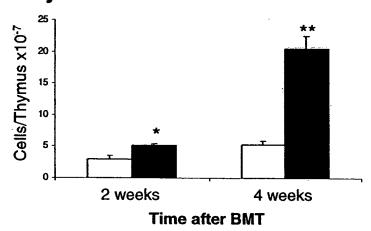
Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153





#### B. **Thymus**



# Spleen

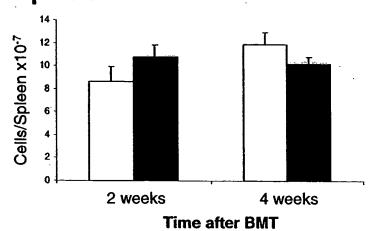


Figure 30

FILING DATE: December 2003 Disease Prevention by Reactivation of the Thymus

TITLE: DOCKET NO.: NOR-014CP4/286336.153

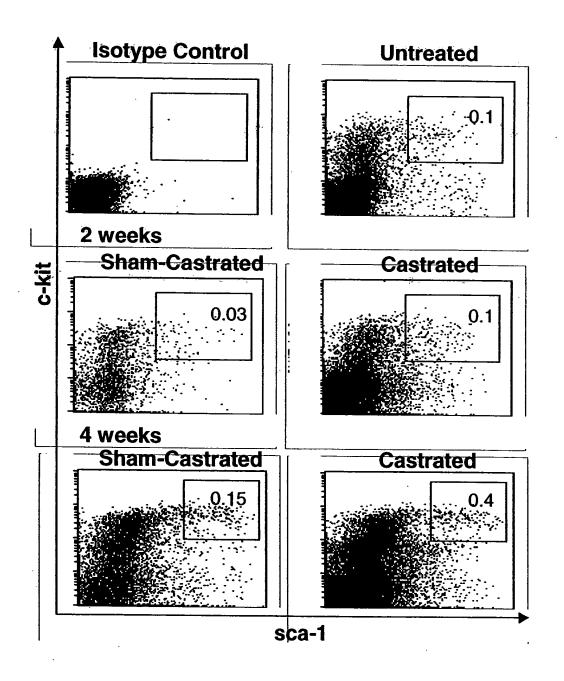
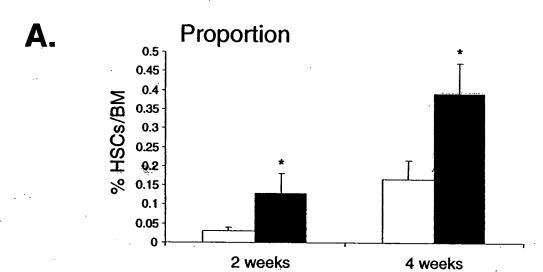


Figure 31

FILING DATE: December 30, 2003

Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153



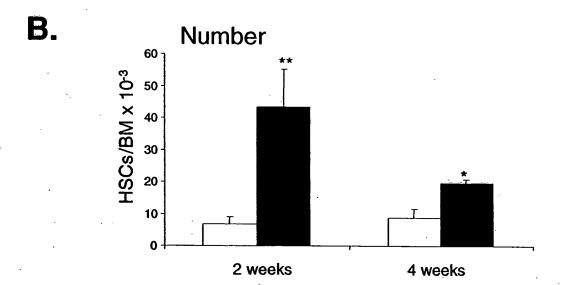


Figure 32

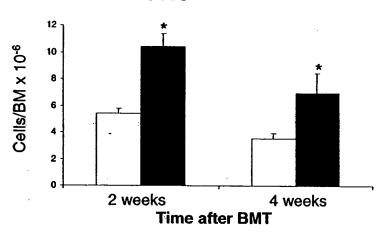
FILING DATE: December 39, 2003

Disease Prevention by Reactivation of the Thymus

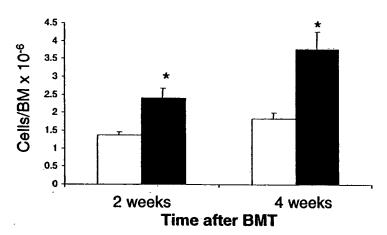
DOCKET NO.: NOR-014CP4/286336.153

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# A. B Cell Precursors



## B. B Cells



APPLICANT: Boyd TBD APPLN. NO.:

FILING DATE: December 2003
TITLE: Disease Prevention by Reactivation of the Thymus

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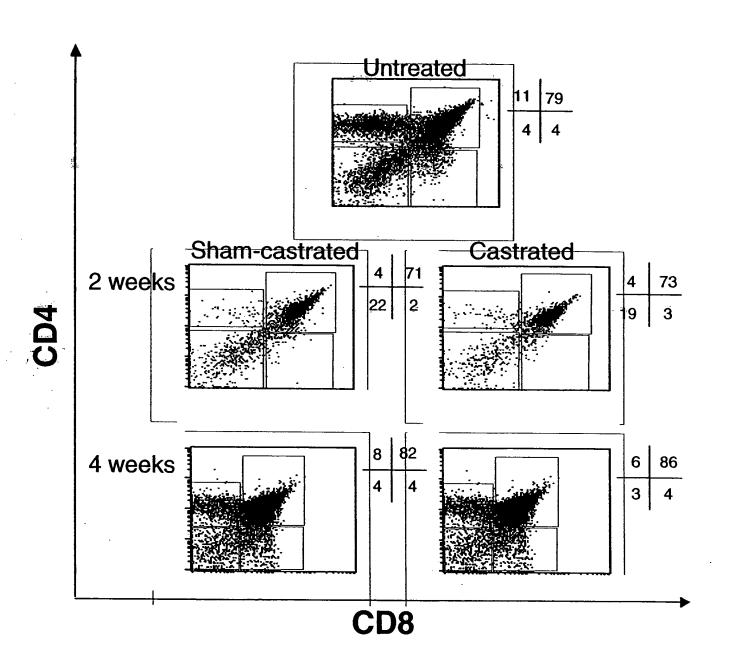
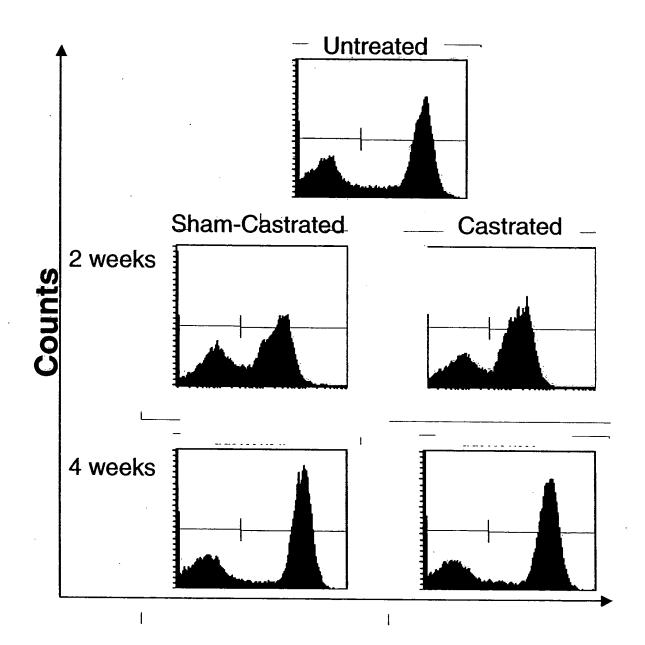


Figure 34

FILING DATE: December 39, 2003

Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153



APPLICANT: Boyd

APPLN. NO.: TBD

FILING DATE: December 27, 2003

TITLE: DOCKET NO.: NOR-014CP4/286336.153

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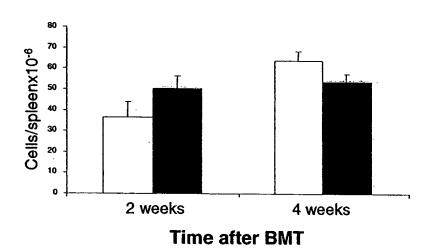
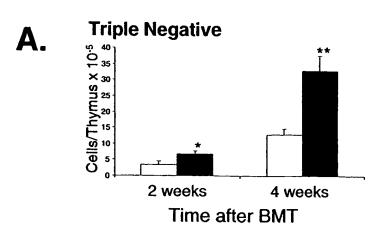


Figure 36



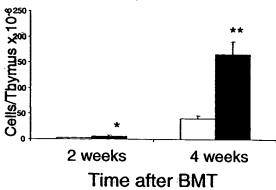
FILING DATE: December 39, 2003

Disease Prevention by Reactivation of the Thyri

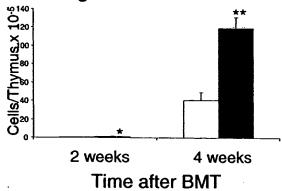
DØCKET NO.: NOR-014CP4/286336.153

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### **CD4 Single Positive**



### **CD8 Single Positive**

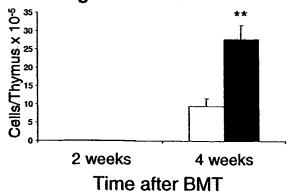


Figure 37

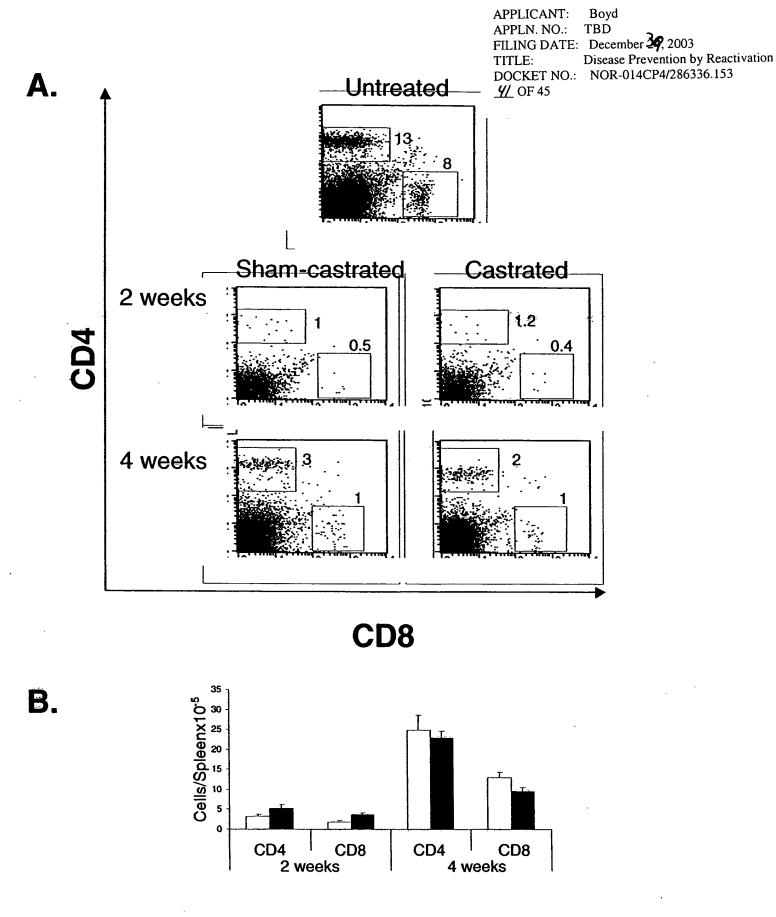


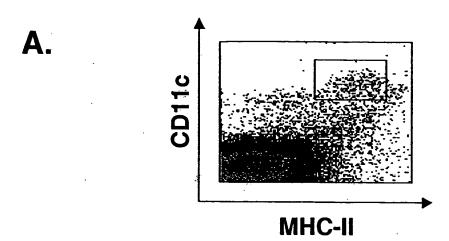
Figure 38

Boyd TBD APPLICANT: APPLN. NO.:

FILING DATE: December 29, 2003
TITLE: Disease Prevention by Reactivation of the Thymus

DOCKET NO.: NOR-014CP4/286336.153

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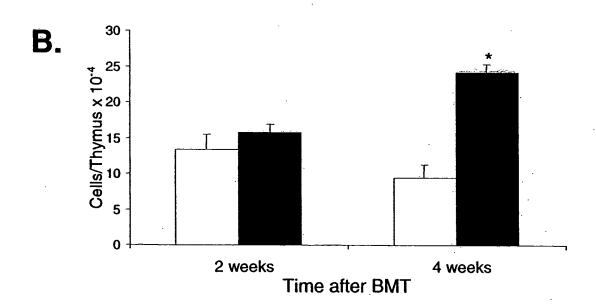
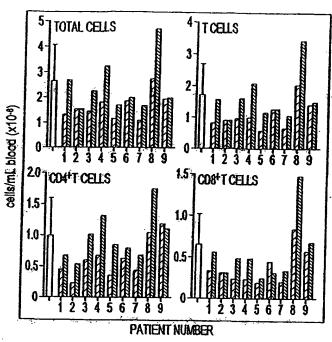


Figure 39

FILING DATE: December 2003

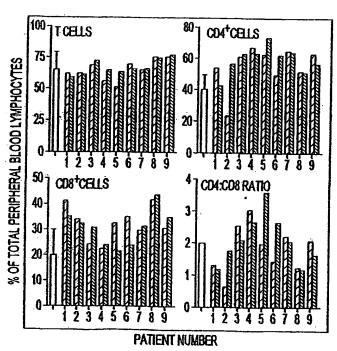
TITLE: Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153

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☐ CONTROL ☐ PRE-LHRH-A TREATMENT ☐ 4 MONTHS OF LHRH-A TREATMENT

# Figure 40

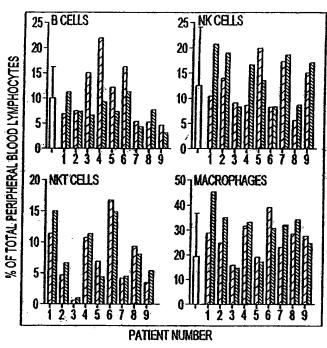


□ CONTROL 12] PRE-LHRH-A TREATMENT 1831 4 MONTHS OF LHRH-A TREATMENT

FILING DATE: December 2003

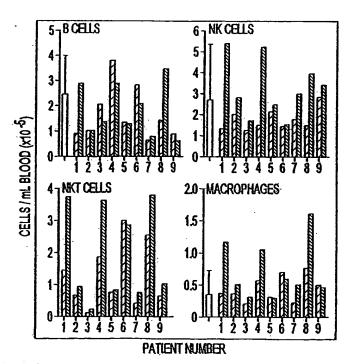
TITLE: Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153

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☐ CONTROL Ø PRE-LHRHA TREATMENT 🖾 4 MONTHS OF LHRHA TREATMENT

# Figure 42



CONTROL DEPRELHRHATREATMENT 1831 4 MONTHS OF LHRHATREATMENT

Figure 43

FILING DATE: December 30, 2003

Disease Prevention by Reactivation of the Thymus DOCKET NO.: NOR-014CP4/286336.153



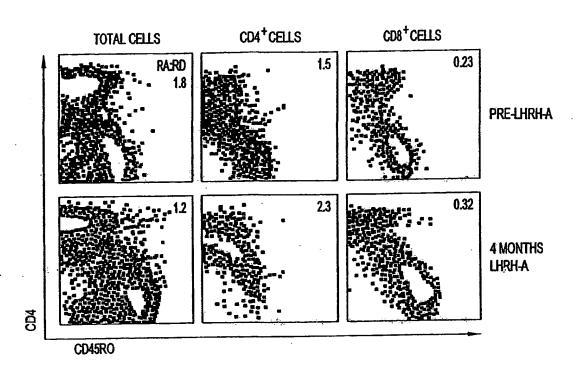
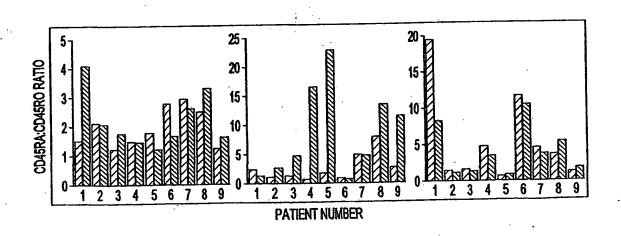


Figure 44A



PRE-TREATMENT

4 MONTHS OF TREATMENT

Figure 44B